Figure 1

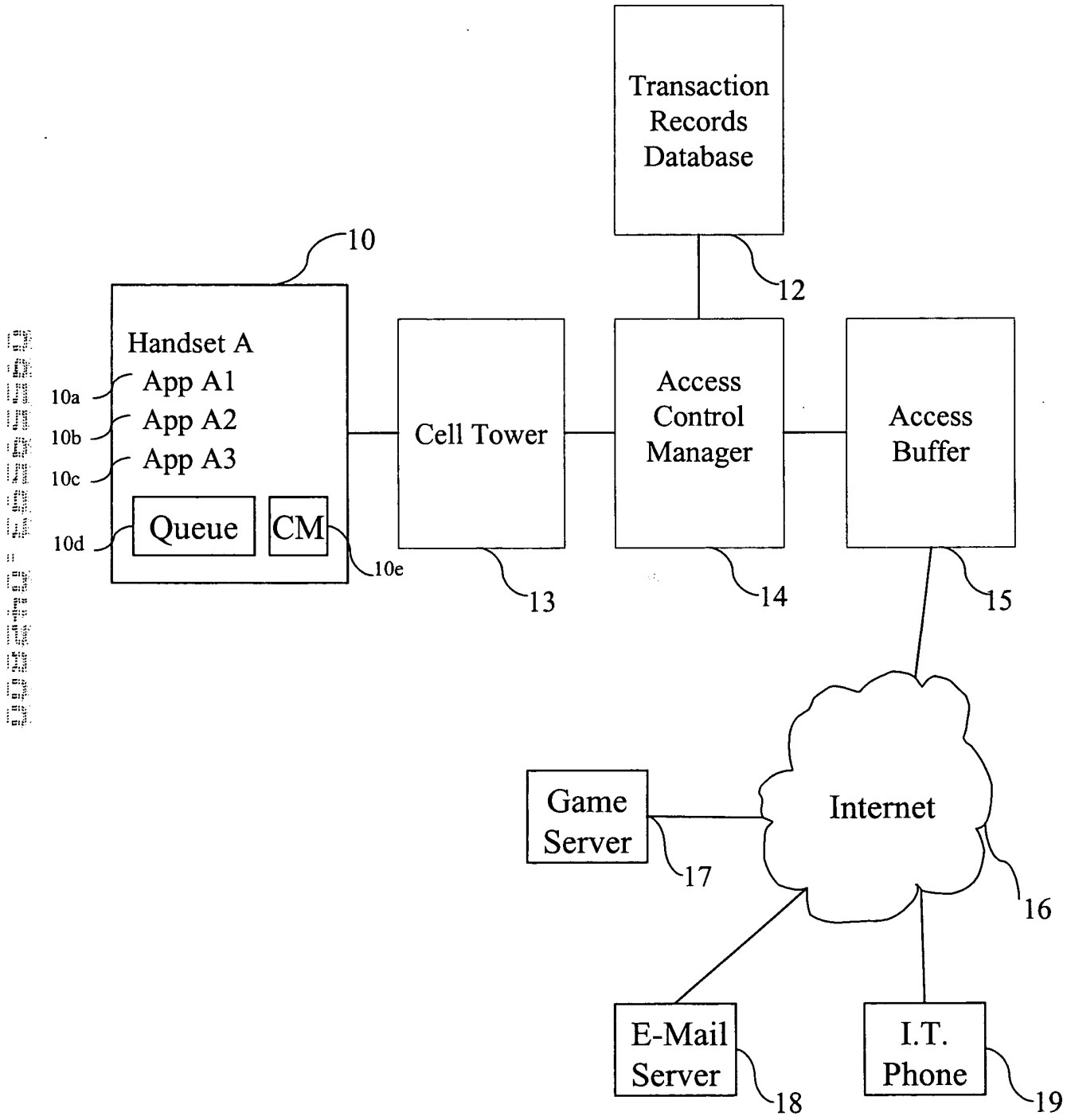
Transaction Records Database
12
10
Handset A
App A1
App A2
App A3
Queue
CM
10a
10b
10c
10d
10e
Cell Tower
13
Access Control Manager
14
Access Buffer
15
Internet
16
Game Server
17
E-Mail Server
18
I.T. Phone
19

Figure 2

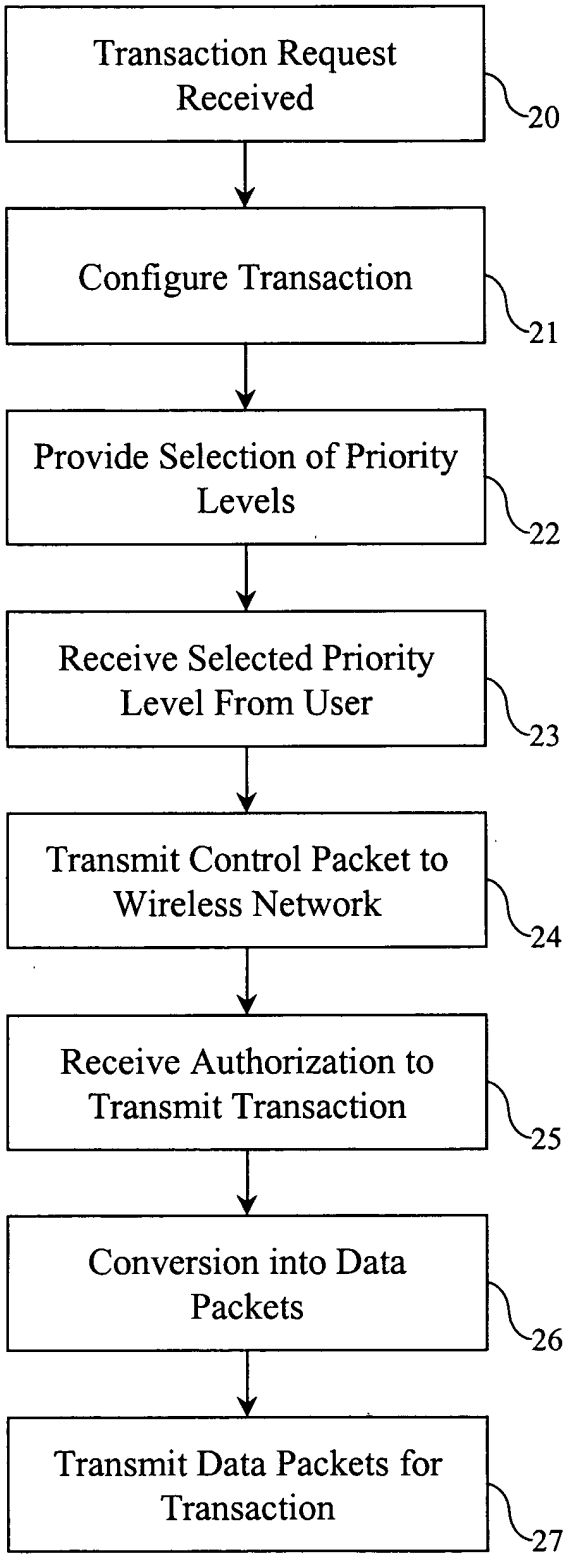
Transaction Request Received
20
Configure Transaction
21
Provide Selection of Priority Levels
22
Receive Selected Priority Level From User
23
Transmit Control Packet to Wireless Network
24
Receive Authorization to Transmit Transaction
25
Conversion into Data Packets
26
Transmit Data Packets for Transaction
27

Figure 3

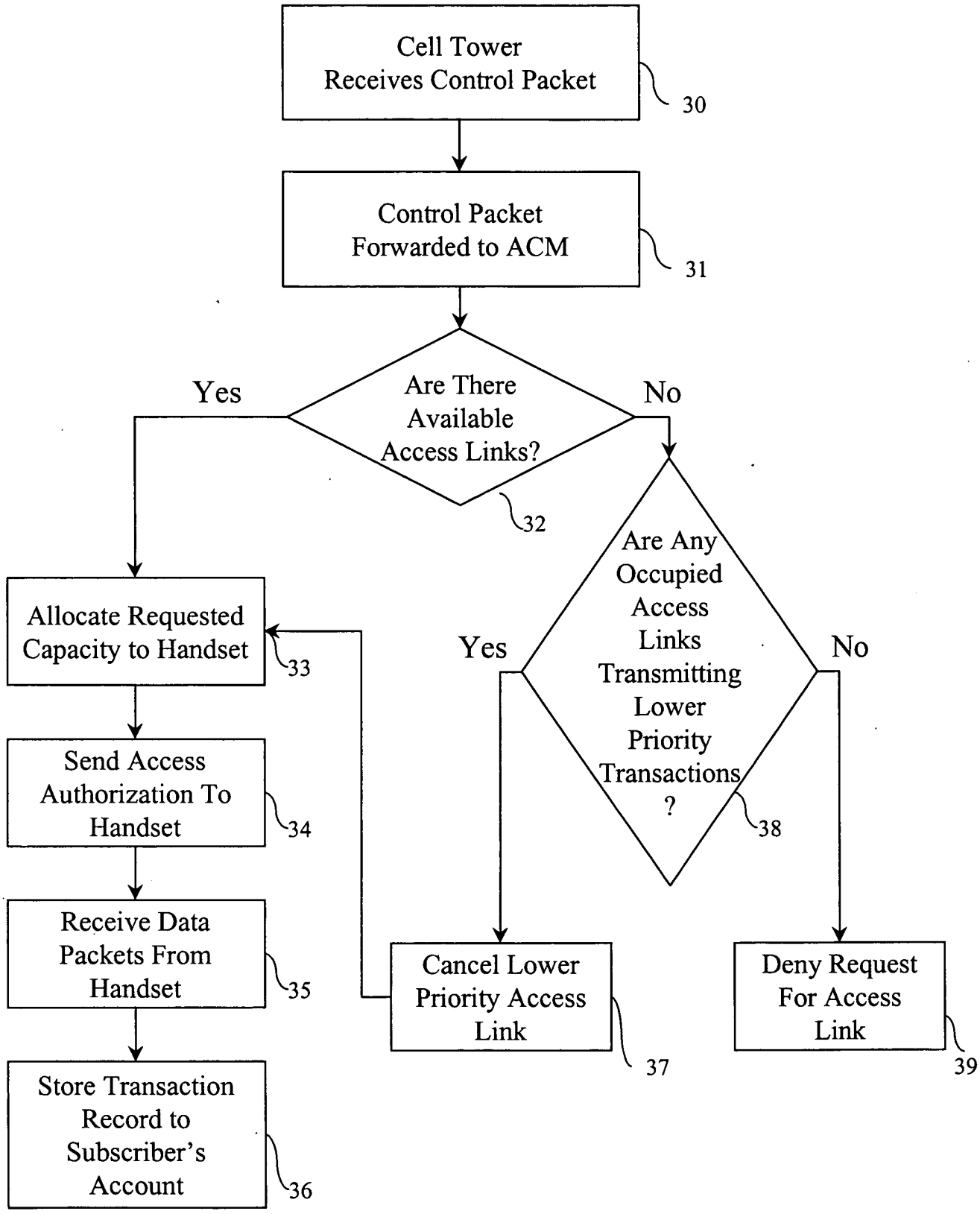
Cell Tower Receives Control Packet
30
Control Packet Forwarded to ACM
31
Are There Available Access Links?
32
Yes
No
Allocate Requested Capacity to Handset
33
Send Access Authorization To Handset
34
Receive Data Packets From Handset
35
Store Transaction Record to Subscriber's Account
36
Are Any Occupied Access Links Transmitting Lower Priority Transactions ?
38
Yes
No
Cancel Lower Priority Access Link
37
Deny Request For Access Link
39

Figure 4

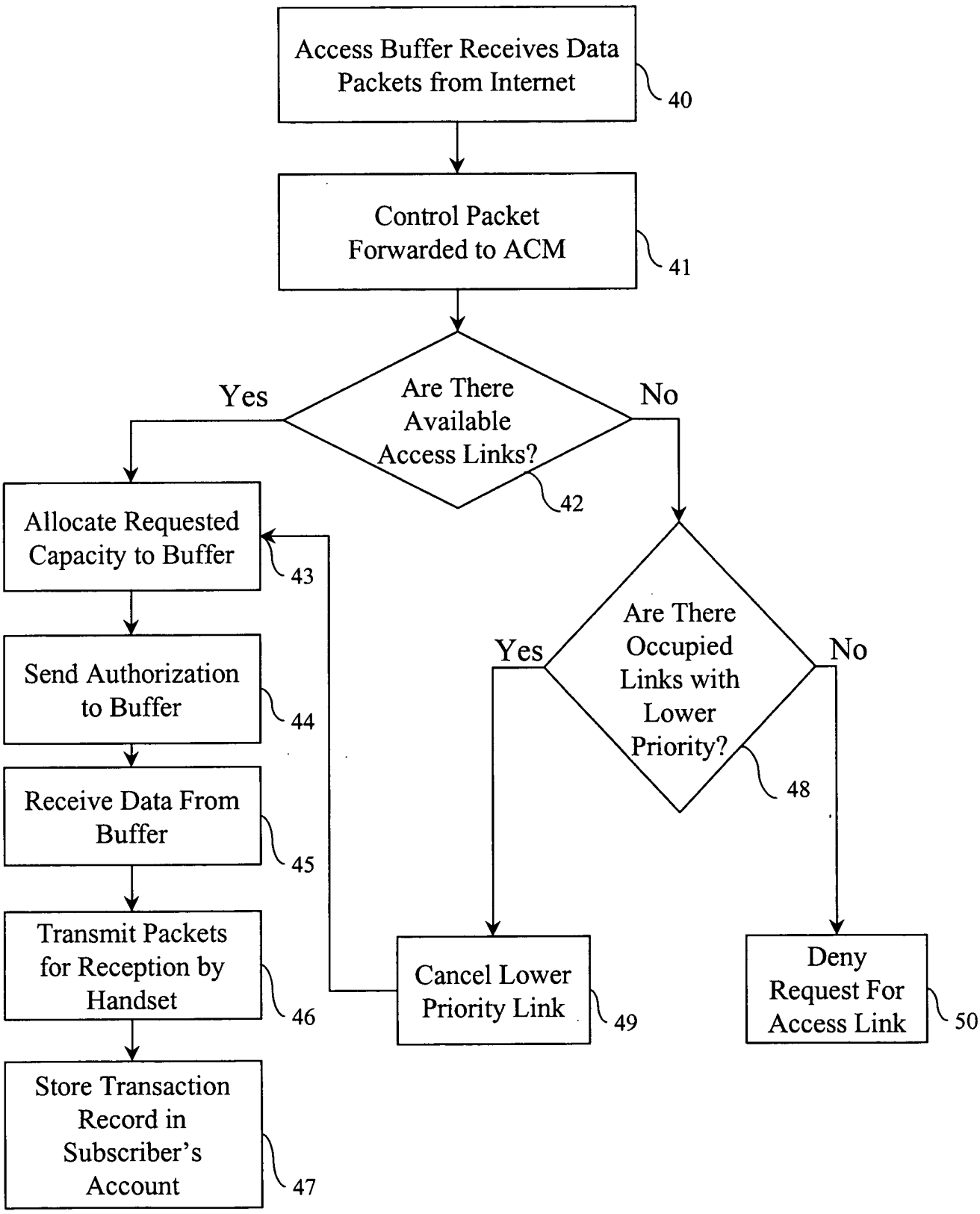
Access Buffer Receives Data Packets from Internet
40
Control Packet Forwarded to ACM
41
Are There Available Access Links?
42
Yes
No
Allocate Requested Capacity to Buffer
43
Send Authorization to Buffer
44
Receive Data From Buffer
45
Transmit Packets for Reception by Handset
46
Store Transaction Record in Subscriber's Account
47
Are There Occupied Links with Lower Priority?
48
Yes
No
Cancel Lower Priority Link
49
Deny Request For Access Link
50

Figure 5A

Carrier	x	2	3	4
Application Developer	1	2	3	x
Customer	x	2	3	x
Available Priority		2	3	

Figure 5B

Carrier	x	x	x	4
Application Developer	1	2	3	4
Customer	x	x	x	4
Available Priority				4

Figure 5C

Carrier	1	2	3	4
Application Developer	1	2	3	x
Customer	1	2	3	x
Available Priority	1	2	3	

Figure 6A

Time	Handset Queue (in data packets)	Handset Side	Direction	Cell Side
1	5	Send control packet	→	Receive Control Packet
2	5	___	_	Evaluate Cell Capacity
3	5	___	_	Discontinue Lower Priority Transaction
4	5	Receive Authorization		Send Authorization to Handset
5	4	Send Data Packet	→	Receive Data packet (Store in a buffer)
6	3	Send Data Packet	→	Receive Data Packet
7	2	Send Data Packet	→	Receive Data Packet
8	2	Receive Discontinue Message		Generate Discontinue Message
9	2	____	__	Provide Access to Other Handsets
10	2	Receive Broadcast Message		Broadcast Available Capacity
11	2	Send Control Packet	→	Receive Request
12	2	Receive Authorization		Send Authorization
13	1	Send Data Packet	→	Receive Data Packet
14	0	Send Data Packet	→	Receive Data Packet

Figure 6B

Time	Handset A	Other Handsets	Cell Side
1	Sent Control Packet	Send Control Packet	Receive Control Packets
2	Receive Authorization	_____	Send Authorization to Handset A
3	Send Data Packet	Receive Authorization	Receive Packet from "A"/Send Authorization to "Other"
4	_____	Send Data Packet	Receive Packet from "Other"
5	Send Data Packet	Send Control Packet	Receive Data from "A" Receive Request from "Other"
6	Receive Data Packet	Receive Authorization	Send Incoming Packet to "A", & Authorization to "Other"
7	_____	Send Data Packet	Receive Data Packet from "Other"

Figure 7

Time	Handset Queue (in data packets)	Handset Side	Direction	Cell Side
1	AAAA	Request Access Level 2	→	Receive Request w/Priority 2
2	BBAAAA	Receive Authorization		Send Authorization
3	BBAAA	Send Data Packet A	→	Receive Data Packet A
4	BBAA	Send Data Packet A	→	Receive Data Packet A
5	BBAA	Receive Discontinue Message		Send Discontinue Message
6	BBAACC	Request Access for Level 1	→	Receive Request for Priority 1
7	BBAAC	Receive Authorization		Send Authorization
8	BBAA	Send Data Packet C	→	Receive Data Packet C